



METROPOLITAN
TRANSPORTATION
COMMISSION

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Memorandum

Agenda Item 2g

TO: Operations Committee

DATE: May 2, 2014

FR: Executive Director

W. I. 1223

RE: Next Steps on Improved Freeway Management - Transportation Management System Technical Advisor Service Contract: Technical Oversight of Transportation Management Center Projects: Iteris (\$200,000)

This memorandum seeks Committee approval of a contract for on-call technical advisor services to support specific projects for Caltrans' Transportation Management Center (TMC). This request follows the March Commission workshop, at which members of the Commission discussed MTC's future role in freeway management. The feedback provided to staff included guarded support for exploring, and potentially implementing, innovative transportation management projects in partnership with Caltrans. Staff will return to the Operations Committee in the coming months to further discuss implementation strategies based on the workshop feedback.

Background

Working with Caltrans over the past decade, MTC has funded, procured, and administered a number of TMC-related projects to improve traffic operations in the Bay Area. Key projects include: (1) the Advanced Transportation Management System (ATMS) (software used by TMC operators to monitor traffic and control field devices such as changeable message signs); (2) a new video wall system for TMC operations; and (3) the Bay Area Video Upgrade (BAVU), which expanded system functionality, hardware and software to over 300 Closed Circuit TV field sites. TMC operators rely on these tools to monitor and manage freeway traffic and incidents throughout the Bay Area. These TMC projects are now being managed as part of the new Transportation Management System (TMS) program.

Today, staff is seeking this Committee's approval to execute a contract to support an item from the Near-Term TMS Priority Investments list (Item 2 in Attachment A.) Staff will return to this Committee this summer to seek approval of additional contracts to implement other projects in Attachment A.

Selection Process

In August, 2013, MTC issued a Request for Qualifications to pre-qualify firms for on-call TMS technical advisor services for a three-year period ending on June 30, 2016, with an option on the part of MTC to extend contracts in one year increments through June 30, 2020. At its October 4, 2013 meeting, the Operations Committee approved a competitively-procured pre-qualified panel of six consultants to provide on-call TMS technical advisor services to support MTC operational programs.

In December 2013, MTC invited interested firms on the bench to submit an approach, budget, and schedule for several proposed TMS projects, including technical assistance on TMC-related projects. MTC staff met with the consultants in late December and early January, to answer any questions the consultants had regarding the various projects. For the TMC projects, MTC received responses from Cambridge Systematics, Inc., DKS Associates, Iteris, and Kimley-Horn and Associates, Inc. Based upon the written responses, and input from Caltrans staff who reviewed the consultant responses, the panel recommends selection of Iteris. Iteris has significant experience and familiarity working on TMC-related projects (e.g., ATMS, BAVU) and has worked on many other software and hardware integration projects, including video wall installations. Their proposed approach provides a systematic and system-wide review of the TMC projects; additionally, Iteris is staffed to meet an aggressive schedule.

Scope of Work

In order to streamline the technical review of projects, staff recommends entering into a contract with Iteris through June 30, 2015 to serve in a technical review and support role. Iteris would oversee the final acceptance testing of ATMS, a new video wall processor, and BAVU. Iteris would also explore streamlining future maintenance activities. Furthermore, Iteris would propose strategies for ongoing project maintenance and equipment replacement. This work would include coordinating with MTC, Caltrans, and the various contractors associated with these TMC-related projects that are in varying stages of deployment.

Recommendation

Staff recommends that the Committee authorize the Executive Director or his designee to negotiate and enter into a contract with Iteris in an amount not to exceed \$200,000 to provide technical guidance and support for existing TMS projects through June 30, 2015.



Steve Heminger

SH: evw

REQUEST FOR COMMITTEE APPROVAL

Summary of Proposed Contract

Work Item No.:	1223
Contractors:	Iteris (Berkeley, CA)
Work Project Title:	Transportation Management System (TMS) Technical Advisor Service Contract
Purpose of Project:	Oversee technical aspects of Transportation Management Center (TMC) projects.
Brief Scope of Work:	Provide oversight and technical guidance for TMC projects.
Project Cost Not to Exceed:	\$200,000
Funding Source:	BATA
Fiscal Impact:	Project cost is consistent with funds budgeted in the FY 2013-14 agency budget.
Motion by Committee:	That the Executive Director or his designee is authorized to negotiate and enter into a contract with Iteris through June 30, 2015 to provide technical guidance for TMS projects, as described above and in the Executive Director's memorandum dated May 2, 2014. The Chief Financial Officer is directed to set aside funds in the amount of \$200,000 for such contract.
Operations Committee:	<hr/> Jake Mackenzie, Chair
Approved:	Date: May 9, 2014

Attachment A: Near-Term TMS Priority Investments

The following table summarizes recommended FY 14/15 near-term projects that will serve as the foundation for the future performance-based regional TMS program. Staff developed this list together with Caltrans and the California Highway Patrol. Item 2 (highlighted below) would be supported by Iteris.

Project/Activity	Estimated Capital Cost	Estimated Operating Cost	Estimated Total
1. TMS Performance Program			
Field Equipment Management Database and Asset Inventory a. A fully-populated and maintained database will be integral to the success of any performance-based TMS program. This project will implement a centralized location to store Traffic Operations System (TOS) asset data, and includes Performance Program contract staff to assist with database population and maintenance.	\$1,500,000	\$575,000	\$2,075,000
Detection Pilot Corridor b. This project will develop a Concept of Operations for a detection network that meets Caltrans and MTC's needs, and will identify an appropriate mix of data collection technology for a pilot corridor. This project also will determine a schedule for when equipment will be maintained and deployed if necessary.	\$400,000	Covered under Project #3b	\$400,000
Performance Based Program Staffing c. This project provides for new Transportation Management Center positions to support a performance-based TMS program.	N/A	\$785,000	\$785,000
2. Existing Projects and Needs			
On-Call TMS Technical Advisor Services (Seeking approval at the May 9, 2014 Operations Committee meeting) <i>This project provides technical oversight for TMC-related projects (e.g., ATMS, BAVU, video wall).</i>	N/A	\$200,000	\$200,000
3. Operations and Maintenance			
Bay Area Video Upgrade (BAVU) a. This project includes replacing the BAVU server and provides maintenance to the software so access to Closed Circuit TV (CCTV) cameras in the field can be continued.	\$72,000	\$80,000	\$152,000
Operations and Maintenance Bench Contract b. This establishes an inclusive performance-based operations and maintenance bench contract. It will include emphasis on analyzing reasons for equipment failures (including communication issues) and set aside resources to repair failures. Resources in this bench contract will help to meet performance goals set for the priority corridors. This project will also cover maintenance costs related to capital infrastructure in the Tier 1 communications project, BAVU, Center-to-Center and I-880 fiber installation.	N/A	\$1,500,000	\$1,500,000

Project/Activity	Estimated Capital Cost	Estimated Operating Cost	Estimated Total
4. Communications			
Fiber Installation Along I-880 a. This project contributes funding towards the installation of new fiber in existing empty conduits along I-880, from Davis Street to Auto Mall Parkway, working in partnership with Express Lanes.	\$500,000	Covered under Project #3b	\$500,000
Implement Communication Assessment Tier 1 Project b. This will evaluate feasibility of tier 1 projects identified in the Communication Infrastructure and Needs Assessment and implement the selected project.	\$460,000	Covered under Project #3b	\$460,000
Center to Center c. This project will replace the Smart Card at a network hub and support maintenance of fiber SONET nodes for the Regional Communication Network	\$30,000	\$247,500	\$277,500
5. Program Contingency			
These funds will serve as a contingency for any potential unforeseen needs (e.g., additional technical implementation support, new capital or operation improvements).	N/A	\$650,000	\$650,000
Totals	\$2,962,000	\$4,038,000	\$7,000,000

*All projects costs are estimates and subject to change. Updated 4/16/14